WHAT IS CLAIMED IS:

1. A method of preparing an anatomical vessel contained within a tissue bundle for ligation, comprising the steps of:

positioning a cannula adjacent to said tissue bundle, wherein said positioning is non-penetrating, said cannula including a first extendable member, a second extendable member, a Doppler wand, and a distal end;

transmitting ultrasound signals toward said vessel through said tissue bundle with said Doppler wand;

receiving ultrasound signals reflected by said vessel through said tissue bundle with said Doppler wand;

invaginating said tissue bundle with said first extendable member on a first side of said tissue bundle;

invaginating said tissue bundle with said second extendable member on a second side of said bundle opposite said first side; and

interpenetrating a length of ligation material between said first and second extendable members on a side of said vessel opposite said cannula distal end.

2. The method as set forth to Claim 1, wherein said first extendable member includes a detachable element to which said ligation material is attached, and further comprising grabbing said detachable element with portions of said second extendable member.

3. The method as set forth to Claim 1, further comprising the steps of:

retracting said second extendable member in a proximal direction; and

releasing said detachable element from said first extendable member.

4. The method as set forth to Claim 1, wherein said first extendable member includes a tissue penetrating element to which said ligation material is attached, and further comprising piercing said tissue penetrating element into said tissue bundle.

5. The method as set forth to Claim 4, wherein said tissue penetrating element includes a detachable element to which said ligation material is attached, and further comprising grabbing said detachable element with portions of said second extendable member.

6. The method as set forth to Claim 4, further comprising the steps of:

retracting said second extendable member in a proximal direction; and

releasing said detachable element from said first extendable member.

7. A ligation device for invaginating tissue adjacent to a vessel contained within the tissue bundle comprising:

means for noninvasively positioning a cannula about said tissue bundle, said cannula including a Doppler wand and a distal end;

means for transmitting ultrasound signals toward said vessel through said tissue bundle with said Doppler wand;

means for receiving ultrasound signals reflected by said vessel through said tissue bundle with said Doppler wand;

first means for invaginating said tissue bundle on a first side of said tissue bundle;

second means for invaginating said tissue bundle on a second side of said bundle opposite said first side; and

means for interpenetrating a length of ligation material between said first and second invaginating means on a side of said vessel opposite said cannula distal end.

8. The device as set forth to Claim 7, wherein said first invaginating means comprises a first extendable member having a detachable element to which said ligation material is attached, and further comprising means for grabbing said detachable element with portions of said second invaginating means.

9. The device as set forth to Claim 8, wherein said second invaginating means includes a second extendable member, and further comprising:

means for retracting said second extendable member in a proximal direction; and

means for releasing said detachable element from said first extendable member.

10. The device as set forth to Claim 7, wherein said first extendable member includes a tissue penetrating element to which said ligation material is attached, and further comprising means for piercing said tissue penetrating element into said tissue bundle.

11. The device as set forth to Claim 10, wherein said tissue penetrating element includes a detachable element to which said ligation material is attached, and further comprising means for grabbing said detachable element with portions of said second extendable member.

12. The device as set forth to Claim 10, further comprising:

means for retracting said second invaginating means in a proximal direction; and

means for releasing said detachable element from said first extendable member.